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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,738	02/08/2002	Bryan J. Donoghue	3812-US	9291
56436	7590	04/18/2006	EXAMINER	
3COM CORPORATION 350 CAMPUS DRIVE MARLBOROUGH, MA 01752-3064			PHUNKULH, BOB A	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/067,738	<b>Applicant(s)</b> DONOGHUE ET AL.	
	<b>Examiner</b> Bob A. Phunkulh	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 33-39 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-32 and 40-42 is/are allowed.
- 6) ☒ Claim(s) 1, 14-17 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 2-13, 18, 23-29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>see attachment</u> . | 6) <input type="checkbox"/> Other: _____  |

6/20/05; 5/5/03; 1/24/03; 9/06/02

## DETAILED ACTION

### *Election/Restrictions*

Claims 33-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/15/2006.

### *Claim Objections*

Claim 4 is objected to because of the following informalities: please correct a type "3enter" to --enter--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.

Claim 1, 14-17, 19-22 are rejected under 35 U.S.C. 102(d) as being anticipated by Byham et al. (GB 2,350,032), hereinafter Byham.

Regarding claim 1, Byham discloses a network stack (see figure 1) comprising:  
a plurality of network units each of which includes a multiplicity of ports for receiving and forwarding addressed data packets (the units 1-3, see figure 1, ports are not shown in figure 1), at least two cascade ports( ports connecting between the units,

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see figure 1) and a switching engine for forwarding received packets to at least one port in accordance with address data in the packets, and

a cascade connection comprising for each of two opposite directions (the down link between the units, see figure 1) around the stack at least one unidirectional path (the uplink between the units, see figure 1) for data packets composed of links each between a respective cascade port on a network unit and a corresponding cascade port on the next network unit.

Regarding claim 14, *Byham* discloses a network unit which is capable of use in a cascade stack of network units and includes:

a multiplicity of ports for receiving and forwarding addressed data packets (not shown in figure 1);

a switching engine for forwarding received packets to at least one port in accordance with address data in the packets (each of the unit includes a switching engine for forwarding the received packets, see figure 1); and

at least two cascade ports for connection to other network units in the stack (each of the unit comprises of an "up" and a "down" ports, see figure 1);

wherein the switching engine provides a normal mode wherein packets received at any of the cascade ports are forwarded from the same port in the same direction of progress and a loop-back mode wherein a packet received at a cascade port is forwarded from a different cascade port in a different direction of progress (see page 3

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lines 1-13).

Regarding claim 15, *Byham* discloses the network unit is responsive to control data (configuration packet) indicating the operational status of other network units in the stack to determine the mode (page 3 lines 1-14).

Regarding claim 16, *Byham* discloses the network unit having a bypass mode in which packets received at a cascade port and intended for further transmission on the cascade are forwarded from the same port without being redirected by the switching engine (loop back mode, see page 3 line 30-31).

Regarding claim 17, *Byham* discloses a network unit which is capable of use in a cascaded stack of network units and includes:

- a multiplicity of ports for receiving and forwarding addressed data packets (each of the network units having a plurality of ports, not shown in figure 1),

- a switching engine for directing received packets to at least one port in accordance with address data in the packets (each of the unit includes a switching engine for forwarding the received packets, see figure 1);

- at least two cascade ports for receiving packets from and sending packets to adjacent network units in the cascaded stack (each of the unit comprises of an "up" and a "down" ports, see figure 1); and

means for detecting an operational failure between this network unit and an adjacent network unit in the stack and for controlling the switching engine to redirect packets which would otherwise be sent from a particular port to that adjacent network unit to be forwarded from another port whereby to be sent to a different network unit in the stack (see page 6 line 26 to page 7 line 7).

Regarding claim 19, *Byham* discloses the unit has at least one cascade port for reception and forwarding of packets in a first direction around the cascade and at least one cascade port for reception and forwarding of packets in a second direction around the cascade (port "11" and port "12" as shown in figure 1).

Regarding claim 20, *Byham* discloses having at least two cascade ports for each of the first and second directions (ports "11" and ports "12" as shown in figure 1).

Regarding claim 21, *Byham* discloses the unit includes control logic for forwarding control frames to and receiving control frames from one each of two control paths and for thereby determining the operational status of other network units so as to control said switching engine (processing section 15, see page 4 lines 22).

Regarding claim 22, *Byham* discloses the control logic detects the operational failure (link detection function 127 or 128, see page 7 line 1-3).

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***Allowable Subject Matter***

Claims 30-32, 40-42 are allowed.

Claims 2-13, 18, 23-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims:

***Conclusion***

**Any response to this action should be mailed to:**

The following address mail to be delivered by the United States Postal Service (USPS) only:

Mail Stop \_\_\_\_\_  
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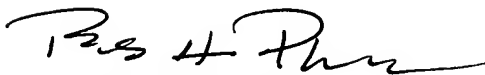


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Wellington Chin**, can be reach on **(571) 272-3134**. The fax phone number for this group is **(571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bob A. Phunkulh  
Primary Examiner  
TC 2600

Technology Division 2616  
April 14, 2006

**BOB PHUNKULH**  
**PRIMARY EXAMINER**